



Gender Categorization between Islam and Science: The Problem of Integration from Islamic Jurisprudence Perspective

Sayed Sikandar Shah Haneef* and Ali Ahmed Zahir

Department of Fiqh and Usul al-Fiqh
Kulliyah of Islamic Revealed Knowledge and Human Sciences,
International Islamic University Malaysia

Abstract

Modern science anatomically categorizes human babies at birth into four categories: male, female, true hermaphrodite and pseudo hermaphrodite. This binary juridical classification of humans into male (*dhakar*) and female (*untha*) concords mainly with the conclusions of science. Nevertheless, hermaphrodite's (*khuntha*) configuration in Islamic jurisprudence presents a problem where some discordance can be observed between science and Islamic law. Likewise, traditional approach in Islamic law in managing hermaphrodites is challenged by their medical management. Therefore, this paper, while comparing the categorization of hermaphrodites from *fiqh* and scientific perspectives, points to the importance of *fiqh* procedures in managing hermaphrodites medically.

Keyword: *hermaphrodite, Islamic jurisprudence, medical management, science*

Abstrak

Sains moden secara anatomi mengkategorikan kelahiran bayi manusia dibahagikan kepada empat kategori: lelaki, perempuan, hermafrodit tulen dan hermafrodit pseudo. Pengelasan jurudikal perduaan bagi manusia kepada lelaki (*Dhakar*) dan perempuan (*untha*) dirukunkan mengikut kesimpulan sains. Walau bagaimanapun, konfigurasi hermafrodit (*khuntha*) dalam jurisprudens Islam memberi satu masalah di mana berlaku ketakselarasan yang dapat diperhatikan di antara sains dan undang-undang Islam. Pengurusan hermafrodit ditentang oleh pihak pengurusan perubatan mereka seperti pendekatan tradisional dalam undang-undang Islam. Oleh itu, kertas kerja ini menekankan kepentingan prosedur *fiqh* dalam menguruskan perubatan hermafrodit serta membandingkan pengkategorian hermafrodit menurut perspektif *fiqh* dan saintifik.

Kata kunci: *hermafrodit, jurisprudens Islam, pengurusan perubatan, sains*

Introduction

The problem of people born with no distinct male and female genitalia is an age-old phenomenon. In Islamic context, such individual was categorized as hermaphrodite. The Prophet when asked about a hermaphrodite with both male and female like genitalia, he ordained that he could be regarded either as a male or female depending on the passage from which he urinates. But if such a baby cannot be assigned a sex by this criterion, then the jurists mostly formulated their own list of masculine and feminine

criteria physically by which such individual can be determined as he grows into adulthood. Otherwise such individuals would be regarded as *khuntha mushkil* (of indeterminate genders), whereby a separate set of laws governing their positions would be applied (Al-Sarakhsi, 1986).

The medical definition of sexology goes beyond the traditional criteria with its three-tier measurement of chromosomes, reproductive system and hormonal gonads as gender determinants. In this context, it also develops its own categorization of hermaphrodites. The question, therefore, is: To what extent Islamic jurisprudence dealing with hermaphrodite can accommodate scientific criteria to determine the status, particularly of the *khuntha mushkil* (indeterminate intersex)? This paper, therefore, engages in a juridical analysis of this dimension of the debate together with some remarks on medical management of the hermaphrodites.

*Corresponding author: Sayed Sikandar Shah Haneef

Department of Fiqh and Usul al-Fiqh
Kulliyah of Islamic Revealed Knowledge and Human Sciences, IIUM
Email: zahids1@hotmail.com

Islamic Jurisprudence on Hermaphrodite

In Islamic jurisprudence, a hermaphrodite is called *khuntha*. In principle, *khuntha* refers to a person of intermediate sex who normally either has the external reproductive organs or an opening passage of both male and female (Abd. Allah, 2010; Al-Lahim, 1986; Al-Qarari, 2008; Ibn Qudamah, 1985).

Since the normative standard of human classification in terms of sex in Islam only grants space for a binary system of male and female genders, jurists connect a person with both male and female genitals to either male or female gender, based on the potency/functionality of one of the two organs, i.e., if he urinates from the penis is regarded as a male but if otherwise, is classified as a female. This is of paramount significance in Islam that an individual as a matter of social norm must be classified as either of the two, male or female gender (*The Qur'an* 4:1; *The Qur'an* 42:49; *The Qur'an* 75:38-39). This is to cater for gendered structure of Islamic rules of conduct which call for segregated or differentiated application of some laws on individuals. For example, one instance is the different portion of inheritance which a son and a daughter would receive from the estate of their deceased father. It was in response to this legal question that the Prophet inaugurated the foundation for discourse on the problem of hermaphrodite (intersex) in his answer to the query made by an interlocutor. He was asked as to how a hermaphrodite, born with both male and female genitals, will inherit? The Prophet's answer was that he would inherit as a man if he urinates from the penis and as a female if he urinates from the vagina (Al-Bayahaqi, 1987; Al-Sarakhsi, 1986). In the absence of such physical signs, he is classified as *khuntha mushkil* (ambiguous/indeterminate hermaphrodite). To answer other questions of gender-specific imports, such as how such an individual would pray, whether marry or not, once dead who is to bathe his corpse and so on, Muslim jurists made their own *jtihad*.

For an infant born that way, the preceding statement of the Prophet in designating the urinating organ whether male or female genital, as the main determining factor for differentiating between a male and female infant hermaphrodite, became the yardstick from which the juristic theory of diagnosing the gender of *khuntha* evolved. For instance, Abu Hanifah holds that a *khuntha* is a male if he urinates from his penis but a female if urinates from her female sex organ. But if he urinates from both, his gender is determined on the basis of which of the two organs he excretes the urine first. If both organs excrete simultaneously, Abu Hanifah reserved from commenting but his disciples, Abu Yusuf and al-Shaibani, held that from whichever

of them he urinates more, would determine his gender (Al-Sarakhsi, 1986).

If the predominance of maleness and femaleness in hermaphrodites cannot be determined during infancy as such, the Hanafi jurists postponed their judgment until the infant reaches puberty. For instance, Al-Kasani held that if a hermaphrodite, upon reaching puberty, grows a beard and is able to penetrate women, he is a male but if he is going to have large breasts, menstruates and conceives and can be penetrated through her vagina, she is a female. But if he exhibits no such masculine or feminine traits, he would be declared as *khuntha mushkil* (Al-Kasani, 1987).

Hanbalis also concurred with Hanafis' criteria of urinating organ and quantity of the urine produced by any of the organs for distinguishing indeterminate hermaphrodites from determinate hermaphrodites during infancy. But they looked for the secretion of semen, menses and growth of beard and breasts as indicators for determining the sex of the adult hermaphrodites. Ibn Qudamah, however, opined that hermaphroditism subsumes other complex cases of indeterminate sex which up to his time were unknown to the community of jurists. For instance, a baby may be born with no genitals but with an opening from which his urine continuously oozes, or he may have a single opening passage from which he excretes both feces and urine, or he may totally lack genital openings whereby he vomits what he has eaten (Ibn Qudamah, 1985).

Imam Malik held that a hermaphrodite is primarily a male but God has created him with an extra genitalia. Nevertheless, the majority of Malikis agreed with Hanafis' criteria for determining the sex of an infant hermaphrodite. Similarly, they specified the growth of breasts and menses as indicators of the effeminacy of a pubescent hermaphrodite, but the occurrence of nocturnal dream in him as an indication of him to be a male. Nevertheless, if a hermaphrodite exhibits either both masculine and feminine characteristics, or none of them, he would belong to the category of indeterminate hermaphrodite (Al-Qarafi, 1998).

Subscribing to the same view in the case of an infant hermaphrodite, Shafi'is added more criteria. If such an individual urinates from both genitals, we should see from which of them he starts first and then from which he stops first, and then which of the two drops more urine. If the starting and ending of urination are simultaneous, then the standard is the amount of the urine which any of the organs excretes (Al-Nawawi, 1991). In the case of pubescent hermaphrodites, they refuted the growth of beard and breasts as early indicators of sex configuration but underlined a number of other signs:

- 1) Secretion of semen. If he secretes semen from both genitals, then it has to be examined whether it is sperm or ovum. However, if he secretes sperm from one and ovum from another organ, then no sex can be assigned to him; and
- 2) Menstruation. If he urinates from the penis and menstruates from female like genital, this is complicated as he can be male or female (indeterminate) (Al-Nawawi, 1991).

Intersexuality in Science

A hermaphroditism is considered a kind of sexual development disorder which is called intersex condition in science. It broadly encompasses numerous types of sexual anomaly from which an individual may suffer. Beyond the complex mixture of internal sexual anomaly, an intersex more often includes those born with ambiguous genitalia. For instance, a baby boy with an abnormal penis may have ovaries instead of testes, or a baby girl with abnormally large clitoris resembling a penis may not have proper internal sexual organs (Ehrenreich & Barr, 2005). The scientific reason as to why this happens is that “it arises when genetic and/or hormonal patterns cause an embryo to exhibit a pattern of sexual differentiation that combines elements of both male and female developmental pathways” (Ehrenreich & Barr, 2005). This is referred to as an altered biochemical pathway which causes an intersex condition.

The most common types of intersex in science are:

- 1) Children born with abnormal female genitalia but with no internal female sex organs like uterus or fallopian tubes due to a condition known as Androgen Insensitivity Syndrome (AIS). They are chromosomally male individuals (XY) but are completely or partially unable to process the androgens made by their own testes. If they are Complete AIS (CAIS), they will be born with somewhat female genitalia but their testes still prevent them from having uterus and fallopian tubes. But if they are born with Partial AIS (PAIS) conditions, will have masculinized female external genitalia (e.g., clitorimegaly, or enlarged clitoris) to mildly under-masculinized male external genitalia (e.g., micropenis). They are considered as girls at birth due the shape of their genitalia but at puberty they fail to menstruate (Ehrenreich & Barr, 2005; Mohamed & Noor, 2014). To Woodhouse, AIS intersex are also called true hermaphrodites as the first type have one testes and one ovary; 60% having vagina with rudimentary uterus but with one descended gonad; 90% some kind of vagina but no uterus. But raising them as girls can be successful. The second types have some short potent penis or with rudimentary penis incapable of sexual intercourse (due to a condition known as cloacal entropy). Raising them as girls has yielded paradoxical outcomes i.e., feminine gender identity but masculine role play. Rearing them as males has proven more problematic as they exhibit psychological problems and are prone to criminality (Woodhouse, 2004).
- 2) Children born with abnormal external female genitalia but no internal female sex organs like uterus or fallopian tubes due to a condition called 5-Alpha-Reductase Deficiency (5-ARD) and described as male pseudo hermaphrodites (Fausto-Sterling, 1993). They also have male (XY) chromosomes intact testes but are unable to convert testosterone into dihydrotestosterone in order to develop male genitalia. They are treated as females at birth due to the appearance of their genitalia but at puberty they start to masculinize (Ehrenreich & Barr, 2005).
- 3) Children born with external masculine genitalia but internally having normal uterus and ovaries due to a condition known as Congenital Adrenal Hyperplasia (CAH) and described as female pseudo hermaphrodites (Fausto-Sterling, 1993). They are chromosomally females (XX) but since adrenal gland produces large amounts of androgens, hormones, they develop ambiguous male genitalia. However, at puberty they often exhibit irregular menstrual periods and more body hair than typical for girls of their ethnic and family background (Ehrenreich & Barr, 2005; Mohamed & Noor, 2014; Woodhouse, 2004).
- 4) Children with micropenis or undescended testes due to a condition called Klinefelter Syndrome (KS) have two or more X chromosomes and a Y chromosome. Accordingly, at puberty they grow sparse facial hairs and breast. Hormonal therapy may help their masculine pubertal development (Ehrenreich & Barr, 2005).

Among the above intersex conditions both AIS and CAH according to Fausto-Sterling (1993), subsumes varying sex-structure compositions (diverse anatomy) whereby raising them as boys or girls will be an uphill task. He states, “for instance, in some true hermaphrodites (AIS) the testis and the ovary grow separately but bilaterally; in others they grow together within the same organ, forming an ova-testis. Not infrequently, at least one of the gonads functions quite well, produces sperm cells or eggs, as well as functional levels of the sex hormone androgens or estrogens. Although in theory it might be possible for a true hermaphrodite to become either father or mother to a child, in practice the appropriate ducts and tubes are not configured so that egg and sperm can meet” (Fausto-Sterling, 1993). Further complication is that

their genitalia's appearance can be deceptive as despite larger number of true hermaphrodites (55%) having relatively male genitalia appearance, urethra running either through or near the phallus, which looks more like a penis than a clitoris, excretes menstrual blood periodically during urination. They also develop breasts at puberty. Some may even develop more feminine sexual anatomy as they develop separate openings for the vagina and the urethra, a cleft vulva (vaginal lips), and at puberty they develop breasts and usually begin to menstruate but their oversize and sexually alert clitoris may sometimes at puberty grows into a penis (if not surgically removed) but they urinate through urethra (opened near the vagina) (Fausto-Sterling, 1993).

Stressing the same puzzle, Dessouky also submits that "True hermaphroditism is the least common and least understood variant of intersex disorders. For instance, it is found that out of 528 cases reported in the literature since 1899, only 114 have provided sufficient information correlating the appearance of the external genitalia, age at diagnosis, karyotype, findings at laparotomy and sex of rearing" (Dessouky, 2001).

Pseudo hermaphrodites are also complex. Male pseudo hermaphrodites have "testes and XY chromosomes, yet they also have a vagina and a clitoris, and at puberty they often develop breasts but do not menstruate. Female pseudo hermaphrodites, on the contrary, have ovaries, two XX chromosomes and sometimes a uterus, but they also have at least partly masculine external genitalia. Without medical intervention they can develop beards, deep voices and adult-size penises" (Fausto-Sterling, 1993). Underlining this uncertainty in neatly configuring the diverse categories of intersex, Sterling concludes that: "sex is a vast, infinitely malleable continuum that defies the constraints of even five categories- which Woodhouse has outlined" (Fausto-Sterling, 1993; Woodhouse, 2004).

Nevertheless, the mystery surrounding sex-configuration of the intersex has not hampered medical profession from surgically managing individuals with such conditions. They believe that the advancement in molecular biology and surgical techniques not only has made it possible to normalize the children with abnormal genitalia which Sterling call it "accidents of birth" but also prevent it prenatally (Ehrenreich & Barr, 2005; Fausto-Sterling, 1993). As to how alarming is the incidence of births with such anomalies, medical fraternity endeavors to down play its occurrence but The Intersex Society of North America (ISNA) maintains that "at least one or two of every 1000 births in the United States leads to surgical alteration of the genitalia" (Ehrenreich & Barr, 2005).

The Position in the Western Tradition

In the western tradition, two issues are the subject of discussion, namely the hermaphrodites' gender roles and their sexuality. Traditionally, their existence, according to Jewish belief is as old as the origin of human. A hermaphrodite was segregated from men when started menstruating. In Europe during the middle ages, they were compelled to stick to a particular gender and not to play the other gender role. In the 1600s a Scottish hermaphrodite living as a woman was buried alive after impregnating his master's daughter. Even Modern Western legal system, until lately ("Germany allows 'indeterminate' gender at birth," 2013), required the children to be registered as either male or female at birth (Fausto-Sterling, 1993).

However, advances in the medical sciences tend to challenge that binary sexual landscape. For instance, the state of Illinois allows adults to change their sex recorded in their birth certificates upon attestation by the surgeon. Nevertheless, the conservative stand still does not accept this. For instance, The New York Academy of Medicine argued in 1966 that surgical alteration of the external genitalia does not imply real change as their chromosomal sex remains the same. Public policy demands that they should not be allowed to conceal their original sex (Fausto-Sterling, 1993).

Similarly, Western culture has come to terms with the sexual orientation of hermaphrodites. For instance, a hermaphrodite brought up as female but with both a penis-size clitoris and a vagina can be allowed to marry and still maintain sexual liaison with women, referred by urologist as "Practicing Hermaphrodites". In this scenario, by 1969, medical experts advocated sex-change intervention not only in the case of infant of this abnormality but even in the case of adult if they wish to be another sex (Fausto-Sterling, 1993).

Nevertheless, it does not imply that this pro-intersexuality treatment enjoys full support among Western thinkers. For instance, the French historian, Michel Foucault has called it bio power, namely the knowledge developed in biochemistry, embryology, endocrinology, psychology and surgery has enabled physicians to control the very sex of the human body.

In this context, Sterling raises two questions against the medical management of sexuality. First: how real is the perceived debilitating psychological pain by intersexuals which its medical management purportedly remedies? If that is true then how many of the pre-bio-power hermaphrodites had committed suicide? Secondly, if a society does not subscribe to the idea of binary sexual system (tolerates multi-sexuality), is it necessary to excise the clitoris of a female hermaphrodite which is large enough to penetrate the vagina of another woman? (Fausto-Sterling, 1993).

Comparison and Harmonization

From the above analysis, it appears that both science and Islamic jurisprudence concur that: first, hermaphroditism is a birth defect; second, this phenomenon can be complex, encompassing variety of genital malformation or internal reproductive system; lastly, there are mainly two categories of hermaphrodites, namely true and pseudo hermaphrodites.

Nevertheless, both diverge on other aspects including: first, classical Muslim jurists consider genital formation and function as the basic criteria to distinguish between true and pseudo hermaphrodites during their infancy whereas science not only examines the shape of the external genitals but also screens chromosomal type, internal urinary and reproductive systems to distinguish the two. For instance, al-Bar says that science can detect such birth defects at earlier stage which jurists had no means to uncover, such as urogenital sinus (one hole for both urine and faeces) or local (one hole for both urine and faeces) as raised by Ibn Qudamah (Abd al-Bar: 2005, p.354). Second, Muslim jurists adopted a gradual approach in their verdict to declare a hermaphrodite either as true (*khuntha mushkil*) or pseudo hermaphrodites (*khuntha ghair mushkil*). Medical science, on the other hand, detects and distinguished between the two, although not with definite precision, at birth and recommends medical intervention, such as hormonal therapy, corrective surgery and chromosomal management (Al-Faradi, 2010).

Considering this scientific achievement as a positive development, al-Bar maintains that with the progress of modern technology in medicine, the problem of *khuntha mushkil* would be resolved once and for all, since medical criteria for sex determination goes beyond the physiological function of genitals, by looking instead to the composition of sex chromosomes, sex gonad, supernal gland, womb and fallopian tube, testosterone etc. That is why to al-Bar and Kazimi, today's medical doctors are better equipped to distinguish between a real female hermaphrodite with the appearance of a man (female pseudo hermaphrodite) and a real male hermaphrodite with the external signs of a woman (male pseudo hermaphrodite). Then it is for the jurists to rule about their socio-legal undertaking (Al-Amin, n.d; Al-Bar, 2007; Al-Khaqani, 2006).

Consequently, juridical bodies and jurists, such as Fiqh Academy in Mecca and Dar al-Ifta of Egypt and contemporary jurists like Nasr Farid Wasil and Muhammad Ra'fat Fawzan, to name a few, welcomed this medical technology and approved of its use to overcome sex-indeterminacy. They based their argument on the authority of the Prophet's hadith on

medical treatment: "God has not created ailments except that He has anticipated by His will a cure for it". And, "O Servants of God seek medical treatment for your ailments." (Ibn Majah, 1987). The Prophet also commanded the removal of the harms and their after effects when he said: "Harm shall neither be inflicted nor reciprocated" (Ibn Majah, 1987). Accordingly, if the genital anomaly is like old juristic example of two sex organs, one potent and another not, then it is like removing the additional finger from one's hand, which would be non-functional anyway. But if it is of the complex type, medical profession can determine its sex ("Fatwa Dar al-Ifta bi Wazarat al-'Adl al-Misriyyah," 2012). Furthermore, to Bushiah, since such a person has no ulterior motive of hiding his real identity but recovering it by such an action provides further moral reason for the legitimacy of seeking medical help as to whether one the organs need to be removed (Bushiah, 2008).

This juridical pronouncement by contemporary Muslim jurists points to the last difference between Western thought and Islamic law in the sense that while medical management of intersex condition is a debatable issue among the "right groups" in the West, Islamic juristic response is one of conditional affirmation, i.e, is allowed provided: 1) the outcome is certain; 2) medical intervention is the only remedy; 3) real sex can be predicted with precision; 4) the procedure is carried out based on the consent from the legal guardians; 5) the procedure is undertaken by competent physicians ("Fatwa Dar al-Ifta bi Wazarat al-'Adl al-Misriyyah," 2012).

Nevertheless, even if one does not agree with the Western critics on "right ground" which is the underdog of their argument against medical management of intersex condition, there are other complex ethical questions which the permissibility of medical management of intersex phenomenon needs to consider: first, what if an infant with CAH condition, after undergoing medical management as a boy during early childhood, exhibits feminine traits and wants to be reassigned as a female gender once he reaches puberty. In such a case, ethical issues, such as permissibility of sex reassignment (Haneef, 2011), ethical permissibility of subjecting such an individual to prolonged and invasive surgical procedures when he was an infant, would arise; second, what would be the psychological impact of surgical intervention on an intersex infant later on in life? And finally, why the gradual approach adopted by classical jurists was not given due consideration to delay the corrective surgery to thwart some of the moral questions which ensue from genital corrective surgery on intersex infants?

Conclusion

The discourse on hermaphrodite condition is one of the complex themes in Islamic law. Juristic paradigm anticipates that while the scope of hermaphrodite can be narrowed down as most of the babies born with such conditions can be declared either as males or females depending on a set of traits which they can exhibit when they proceed to adolescent age, there still remain a category of them which they termed as indeterminate hermaphrodite (*khuntha mushkil*). Medical science backed by findings from other disciplines also has yielded to the fact that intersex condition is rather a complex matter to be fixed merely by medical management. An integrated approach to managing hermaphrodite conditions, as presented in this paper, therefore, could be achieved if the scientific aspect is taken into account to distinguish between true and pseud hermaphrodites and the *fiqhi* delineation is reflected upon when proceeding with their medical management.

References

- Abd. Allah, H. M. (2010). *Al-Masa'il al-Khilafiyah fi 'Ilm al-Fara'id wa Asbabuha: Dirsah Maqaranah*. Amman: Dar Dajlah.
- Al-Amin, A. M. (n.d.). Al-Athar al-Qanuniyyah al-Mutrattabah 'ala Taghyir al-Jins. Retrieved 13 October, 2011, from <http://www.gulfkids.com/vb/archive/index.php/t-7615.html>
- Al-Bar, M. A. (2007). Mushkilat al-Khunthabayn al-Tibb wa al-Fiqh. *Majallat al-Majama' al-Fiqhi al-Islami*, 4(6), 345-365.
- Al-Bayahaqi, A. A. (1987). *Al-Sunan al-Kubra*. Multan: Nashr al-Sunnah.
- Al-Faradi, A. (2010). Hal Yajuz al-Zawaj min al-Khunthawa Hal Yajuz Tazwij al-Khuntha?. Retrieved 15 November, 2013, from <http://alfaradi.com/showthread.php?210>.
- Ali, A. Y. (1991). *The Holy Qur'an: translation and commentary*. US: Amana Corporation.
- Al-Kasani, A. M. (1987). *Bada'i' al-Sana'i' fi Tartib al-Shara'i'*. Beirut: Dar al-Kutub al-'Ilmiyyah.
- Al-Khaqani, M. K. (2006). Al-Khunthabayn al-Tibb wa al-Fiqh. Retrieved 13 October, 2013, from <http://www.alkhaghani.com>.
- Al-Lahim, A. (1986). *Al-Fara'id*. Riyadh: Maktabat al-Ma'arif.
- Al-Nawawi, A. S. (1991). *Al-Majmu'*. Madinah: Maktabah al-Salafiyah.
- Al-Qarafi, A. I. (1998). *Al-Dhakhirah*. Beirut: Dar al-Gharb al-Islami.
- Al-Qarari, S. H. (2008). Al-Khuntha al-Mushkil wa Ishkaliyat al-Taklif al-Fiqhi. Retrieved 23 December, 2013, from <http://islamtoday.net/bohooth/artshow-86-104434.htm>
- Al-Sarakhsi, M. A. (1986). *Al-Mabsut*. Beirut: Dar al-Ma'rifah.
- Bushiah, M. S. (2008). *Jirahat al-Dhukurah wa al-Unuthah fi Daw'al-Tibbwa al-Fiqh al-Islami*. Beirut: Dar al-Falah.
- Dessouky, N. M. (2001). Gender assignment for children with intersex problems: an Egyptian perspective. *Egyptian Journal of Surgery*, 20(2), 499-503.
- Ehrenreich, N., & Barr, M. (2005). Intersex surgery, female genital cutting, and the selective condemnation of cultural Practices. *Harv. CR-CLL Rev.*, 40, 71.
- Fatwa Dar al-Ifta bi Wazarat al-'Adl al-Misriyyah. (2012). Retrieved 23 October, 2014, from <http://www.pls48.net/?mod=articles&ID=1153810#.Vikh7n6rTIU>.
- Fausto-Sterling, A. (1993). The five sexes. *The sciences*, 33(2), 20-24.
- Germany allows 'indeterminate' gender at birth (2013). Retrieved 12 November, 2013, from <http://www.bbc.co.uk/news/world-europe-24767225>
- Haneef, S. S. S. (2011). Transsexuals and Sex Change: Legality Debate in Islamic Law. *Malayan Law Journal*, 6, cxxv-cxlv.
- Ibn Majah, M. Y. (1987). *Sunan Ibn Majah*. Beirut: Ihya al-Turath al-Arabi.
- Ibn Qudamah. A. A. A. (1985). *Mu'jam al-Mughni: Fi al-Fiqh al-Hanbaly*. Riyadh: Dar al-Fikr.
- Mohamed, M. S., & Mohd Noor, S. N. (2014). "Boy or Girl: A Malaysian Religious and Ethical Approach", *Journal of Rivista Rumana de Bioetica*, 12(4), 136-145.
- Nandi, J. (2013). Germany got it right by offering a third gender option on birth certificates. Retrieved April 9, 2015, from <http://www.theguardian.com/commentisfree/2013/nov/10/germany-third-gender-birth-certificate>.
- Sterling, Anne Fausto. (1993). *The Five Sexes: Why Male and Female Are Not Enough*. Retrieved April 30, 2014, from <http://capone.mtsu.edu/phollowa/5sexes.html>
- Woodhouse, C. R. J. (2004). Intersex surgery in the adult. *BJU international*, 93(s3), 57-65.

Article History

Received: 3-12-2013

Accepted: 30-11-2015